

Supplier Selection in Surat Cloth Industry to Maximize Profit

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Abstract: *The purpose of this study is to examine the cost of production in the Surat textile industry by selecting the supplier considering the factors affecting while selecting supplier. No step in any business is more important than the selection of supplier. Efficiency and success are largely dependent on adaptation of suppliers. This vital problem should be solved in a careful mathematical way, with due regards of reducing cost, mitigating risk, driving improvement in quality and the relation of these elements to the condition of success in different industries. Buyer locate a minimum number of viable potential supplier for every product procured*

Keywords: Supplier selections, Cost reduction, Production management, Attract investor.

1. Introduction

A) About Surat

The city of Surat in Gujarat is known for its textile trade and diamond cutting and polishing industries and since 1994 for the Plaque. It is situated in south Gujarat on banks of river Tapi. Historically the cities prosperity declined in early 19th century due to growth of Mumbai. In the past Second World War period, however after a considerable period of stagnancy Surat started regain much of its former importance as a major center of industry and trade in western India. Since early 1960's it is one of the fastest growing cities in the country. As population has increased more than seven times in last seven decades from 3.17 lacks in 1961 to 2.6million in 2011. Much of cities rapid population growth has been caused by in migration of industrial workers attracted by city economic development, particularly rise of small scale industry sector.

Surat is an industrial boom town with most of its working population mainly engaged in small scale industry. After an initial setback in early nineteenth century due to influx of Japanese and European goods, the task of industry was revived in early years of present century, Since in 1980 the industry has flourishing again due to growing exports.

2. Approach:

2.1 Need of Good Suppliers

Objective

- 1) Finding the ability of supplies to meet the buyers requirements
- 2) Time management this should not be delays in delivery of material else the cast of product rises as the cost of employ rises
- 3) Quality of product: bad quality of products result in faulty product result in revaluations which cost millions of \$, warranty cost & damage to the regulation & future sales potential
- 4) Improvement of suppliers performance
- 5) Suppliers selection criteria

2.2 AHP

One of the most imported method of MCDM is analytical hierarchy process (AHP) method. AHP is widely used too

multi criteria decision & generally gives better result. The 3 basic provisions are

- 1) Drawing hierarchy tree throw questioner .
- 2) Determining and development of hierarchy.
- 3) Logical consistency of judgment.

2.3 The theoretical foundation criteria for Supplier Selection

(Ray castes 1995)

- 1) **Capacity:** Determine buyer's requirement fulfilled by suppliers.
- 2) **Commitment:** (High quality standers) Quality initiative are determined by six sigma or ISO 9001.
- 3) **Control:** Management over policies, processes, producer and supply chain.
- 4) **Cash:** Determine financial health.
- 5) **Cost:** Cost of product that suppliers provides.
- 6) **Consistency:** Consistently provide high quality good & can get a test product to check it.
- 7) **Culture:** Business relationship based or work place values) e.g. If buyer main value is time and supplier many care about quality. This mismatch could cut the corners.
- 8) **Clean:** Ethical business supplier & treating people around well & follows adherence to environmental law.
- 9) **Communication:** Suppliers should be in touch with buyers and determine how supplier behave at the event of crisis

3. Research Method

3.1. Methodology and Case Study

This study interviews case enterprise is the textile industry in Surat. The traditional handloom weaving industry has given way to power looms, printing and dyeing of textiles. The government of India policy since 1956 of providing incentives and protection to small scale industry sector boosted the power-loom industry in Surat weaves began to the advantage of increasing and converted their handloom in to power-looms. Today the city is one of the largest centers in world for production of synthetic fiber fabrics mainly nylon & polyester. A decision is often made by comparing cost & benefits of available alternative under various environment conditions. In actual study participant were ask to complete the questionnaire and interviewed using open

ended question the decision makes helped to obtain a list of weights for criteria and sub-criteria

3.2 Valuation Criteria

Delivery	9	Compliance with due time	6
		Idle rate	8
		Compliance with quality	10
		Shorten the order cycle time	10
Quality	8	Incoming failure rate	9
		failure rate	5
		reliability	5
		quality	8
		product complain rate	10
		customer complaint rate	10
		refund rate	10
Cost	10	refunded cost ratio	8
		refunded investment cost rate	8
		Price	10
		Exchange rate	10
		Transport cost	9
		Offer lowest price	8
Financial	7	Financial position	9
		Profitability	10
		willing to public financial	9
Improvement Capability	7	improve product rate	8
		Reduced cost program rate	8
Service	5	Warranties	5
		product viability	5
		sales competency	5
Relationship	9	Long term	9
		tight	9
		Open Communication	8
		Reputation	9
Technological competence	7	Process	7
		Design capabilities	8
Other	8	Location	9
		Unexpected Events	7

4. Result

Supplier selection is a complex problem involving multi-criteria. Every criteria in decision making problem can be described by set of criteria. Producers usually have different units of measurement and different optimization direction. It will try to build decision to achieve goal of making the purchasing optimization by combining the expenses of procurement decision makes and the application of information technology. Inflation competition from other supplier makes them more difficult to raise their prices.

5. Conclusion

One of the important lesson that Surat provides to other cities is that it is possible to overcome the most pressing financial problems through proper supplier selection. This all attracts the buyers as well as investors to invest more for the particular industry as it increases profit level.

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